

VERSION: 5.2



### **PRODUCT FEATURES:**

- Wide frequency coverage (100 to 600 MHz)
- High-power, 140 W at 100% duty cycle
- Excellent VSWR
- Omni-directional azimuth pattern
- Rugged and hard-wearing
- Suited to low-profile applications

#### **APPLICATIONS:**

- RCIED suppression (force protection)
- Communications interception

# Wideband VHF/UHF Vehicle Antenna

## 100 – 600 MHz Product Code: MONO-A0063

## SPECIFICATIONS:

Electrical:	
Frequency range	100 – 600 MHz
VSWR: 100 – 550 MHz	< 2.5:1
550 – 600 MHz	< 3:1
Nominal input impedance	50 Ω
Feed power handling	140 W
-	(excluding chassis cooling effects)
Connector	N-type female
Gain:	See graph
(on horison over large ground plane):	
E-plane 3 dB beamwidth	40° (± 10°)
Polarisation	Vertical
Groundplane	Dependent
	Groundplane required
Mechanical:	
Height	550 mm
Diameter	Base 135 mm, radiator 31.8 mm
Weight	< 2.5 kg
Mounting base	NATO 4 and 6 hole flange
Environmental: designed to me	et the following specifications
Wind survival	160 km/h
Storage Temperature	-40 °C to +71 °C
Temperature - storage	-33 °C to +63 °C
Vibration - Operational, Ground	MIL-STD-810G w/Change 1
vehicles	Method 514.7 Category 20
Shock – Functional, Ground	MIL-STD-810G w/Change 1
	Method 516.7 Procedure I
Water ingress rating	IP65

#### **PRODUCT DESCRIPTION:**

The MONO-A0063 is a high-power wideband antenna designed for highpower applications in the 100 to 600 MHz frequency band and recently upgraded for high-power handling and improved gain.

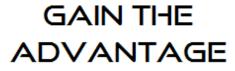
This omni-directional antenna has an excellent radiation pattern, no pattern break-up, and a consistently low VSWR across the entire frequency band. This ensures efficient operation of power amplifiers yielding much high ERP than is accomplished with higher VSWR antennas.

The antenna can handle full rated power continuously at all frequencies, making it ideal for all 100% duty-cycle applications. The rated power of 140 W is possible even if there is poor thermal contact between antenna and vehicle chassis. If good thermal contact is achieved, the power rating can be safely increased to about 200 W.

The anodised aluminium radiator is equipped with spring mounting to allow whip-action and resistance to impacts and obstructions.

The antenna may be used at frequencies as low as 80 MHz if a lower gain can be tolerated. The antenna is designed for direct mounting to ground platform with aid of grounding strap provided.

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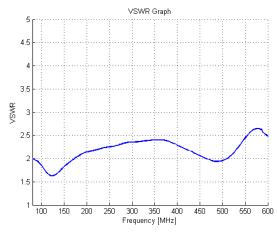
Alaris Antennas has a policy of continuous improvement and hence specifications may change without notice

# Wideband VHF/UHF Vehicle Antenna

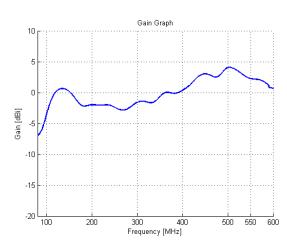
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## VSWR AND GAIN GRAPHS:

**VSWR\*** 



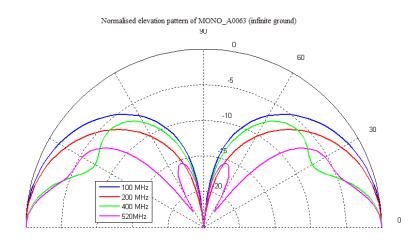
\*Measured on groundplane 5000 mm x 5000 mm



Gain\*\*

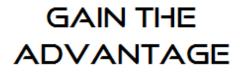


## **ELEVATION PATTERNS\*\*\***



\*\*\*On infinite groundplane

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Updated 2023-06-02

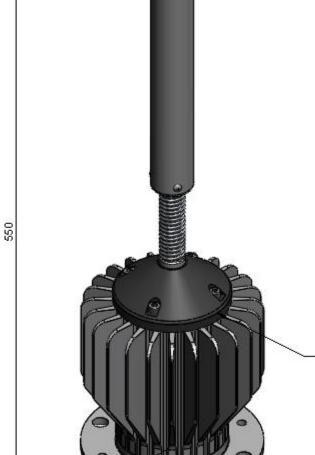
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## Wideband VHF/UHF Vehicle Antenna

# 100 – 600 MHz Product Code: MONO-A0063 ANTENNA DIMENSIONS: VERSION: 5.2



GAIN THE ADVANTAGE

Ø88

Ø135

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